

same with the sender's name. Much confusion and trouble is often caused by such unmarked packages becoming separated from the letters sent with them.

W. B. H. asks: When is the best time for moving grape vines?—S. asks; How can I make a red, blue, and white stencil ink, such as is used for marking boxes, etc.?—C. L. S. and others ask: How can I make transfer paper for marking linen indelibly? It is used in this way: Place the transfer paper upon the linen to be marked, and over that place a piece of ordinary white writing paper, and mark with a lead or slate pencil or stiletto. Heat the writing with a moderately hot flatiron for two or three minutes, and it is permanent.—W. F. W. asks: What prevents bees from swarming, and what will induce them to swarm?

COMMUNICATIONS RECEIVED.

The Editor of the SCIENTIFIC AMERICAN acknowledges, with much pleasure, the receipt of original papers and contributions upon the following subjects:

- On the Keely Motor. By J. C., by E. T., by J. J. A., by O., by C. F., by W. L. D., by B. K., and by J. C. H.
On Evergreens in Orchards. By F. R. E.
On Tides in the Gulf of Mexico. By T. H.
On Powder Mill Explosions. By J. M.
On the Spider's Web. By S. T. W.
On Melting Iron. By T. H. A.
On Spring Power for Cars. By F. G. W.
On a Singular Electrical Phenomenon. By T. P. C.

Also inquiries and answers from the following: G. H. B.—F. H.—J. D. C.—C. C.—J. D. S.—C. B. B.—H. G. W.—D. A. W.—R. C. T.—R. C. C.

HINTS TO CORRESPONDENTS.

Correspondents whose inquiries fail to appear should repeat them. If not then published, they may conclude that, for good reasons, the Editor declines them. The address of the writer should always be given.

Enquiries relating to patents, or to the patentability of inventions, assignments, etc., will not be published here. All such questions, when initials only are given, are thrown into the waste basket, as it would fill half of our paper to print them all; but we generally take pleasure in answering briefly by mail, if the writer's address is given.

Hundreds of inquiries analogous to the following are sent: "Who buys rare coins? Who makes wooden screw bungs? Who builds bridges? Where can molds for ornamental vases be obtained? Who sells pure platinum? Who sells engraver's tools?" All such personal inquiries are printed, as will be observed, in the column of "Business and Personal," which is specially set apart for that purpose, subject to the charge mentioned at the head of that column. Almost any desired information can in this way be expeditiously obtained.

[OFFICIAL.]

INDEX OF INVENTIONS

FOR WHICH Letters Patent of the United States were Granted in the Week ending June 29, 1875, AND EACH BEARING THAT DATE. (Those marked (r) are reissued patents.)

Table listing inventions and their patent numbers, including Addressing machine, Air compressor valve, Anchor, Bale tie, Band fastener, Basket, Basker, Beams, Bed bottom, Bedstead, Beer, Beer with gas, Belt coupling, Bessemer converter, Bit, Bit, wood-boring, Blacking bottles, Blast apparatus, Boiler, Boilers, Boiler feed water heater, Boot, Boot rands, Boot toe protector, Boots, Bottle carrier, Bottle dropping, Bottle measuring, Bottles, Brewer's washing machine, Bung and bush, Burner, Burner for heating, Burner, lamp, Burnling hay, Bustle, Butter box veneers, Camera stand, Can, Canes, Cap, Car brake, Car brake, Car coupling, Car coupling, Car replacer, Car starter, Car starter, Carburer, Carpet stretcher, Carpet stretcher and holder, Carriage seat, Cartridge cases necking.

Table listing inventions and their patent numbers, including Catch for cupboards, Casting plow points, Casting propeller wheels, Centrifugal machine, Chimney cowl, Chuck, planer, Churn, rotary, Cigar mold, Cigar tip cutter, Clutch, friction, Cock, stop, Cooler, milk, Corn stalk cutter, Cotton compressor, Cotton openers, Cotton pickers, Crimping machine, Culinary grater, Cultivator, Dial, gage, Crosby & Meady, Dredger, pneumatic, Drill, steam rock, Drills, chuck for rock, Drip trough for ice boxes, Dryer and baker, Drying apparatus, Egg box covers, Engine, air hand, Engine, electro-magnetic, Engine, fire, Engine governor, steam, Engine governor, steam, Engine, steam, Eyclet, T. Garrick, Fats, separating, Feedcutter, E. Wagoner, Feed cutter, Fence wire, Fence wires stretching, Filling hook for weaving hair cloth, Fire arm, breech-loading, Firebrick, manufacture of, Fire irons, stand for, Fire place, Flower pot, Food preserver, Foot rest, Fork and skewer pull, Fork and skimmer combined, Fruit dryer, Fruit picker, Furnace and range, Furnace and stove, Furniture castor, Fuse, electric, Gage dial, Gas from petroleum, Gas scrubber and condenser, Gateway, Glove stretcher, Grain drill, Grain tally, Harness hame, Harrow, J. Mastern, Harvester, L. B. Stilson, Harvester cutter, Harvester plow, Harvester rake, Hat and cap, Head block, Heating buildings, Heating apparatus, steam, Hen's nest, Hinges, covering plate for, Hook, snap, G. Reynolds, Hopper, J. Shive, Horse toe weight, Horseshoe blank bar, Hose, hydraulic, Hub, A. Rimes, Ice boxes, drip trough for, Ironing board, Jar lifter, Key hole guard, Knife, tobacco, Lane & Cullom, Ladle, Curtis & Rowley, Lamp chimney, Lamp fount, Lamp, gas fitter's, Lantern, reservoir street, Lathing, securing metallic, Leather, treatment of, Lock for doors, Locks, catch plate for bag, Locomotive, hydrocarbon burning, Locomotive exhaust, Loom, J. M. Linscott, Match safe, Measuring packaged fabrics, Moldings, polishing, Motion, transmitting and regulating, Oil tank extinguisher, Oiler, Bohm, Stuhr, and Joeken, Ore, treating, D. Mindeleiff, Organ, reed, Bach and Berg, Organ keyboards, etc., making, M. Pratt, Paddle wheel, J. Salter, Painters' use, breamer for, Paper barrel, Paper box, Paper cutter, rotary, Paper folding machine, Paper folding machine, W. Daniels, Paper folding machine, W. and C. Daniels, Pavement, composition, J. P. Cranford, Pencil case, W. I. Ludlow, Pencil rubber, eraser, J. B. Blair, Photographic head rest, F. M. Spencer, Photographic vignetting machine, C. C. Mcrrill, Photographs, burnisher for, E. R. Weston, Piano stringing device, A. G. Gardner, Picture frame, J. T. Robertson, Pipe, smoking, C. J. Jonassen, Pitman, J. R. Taylor, Planes, guide for bench, H. P. Taylor, Planing machine, wood, J. S. Grabam, Planter check rod attachment, M. Newton, Plows, L. B. White, Plow points, casting, G. Ward, Plow, sulky, G. Moore, Pocket books, clasp for, L. Messer, Polishing machine feed, J. A. Dayton, Posts, metal cap for, J. Davenport, Press, brick and soap, J. H. Hearn, Press, cotton, S. Dike, Press, hay and cotton, J. L. De Witt, Press, hay and straw, L. Kirk, Pump governor, C. W. Mills, Punch, E. J. Brooks.

DESIGNS PATENTED.

- 8,428 to 8,439.—CARPETS.—R. Allan, Yonkers, N. Y.
8,440.—PLANO STROOLS.—G. W. Archer, Rochester, N. Y.
8,441.—STOVES.—W. Burrows, New York city.
8,442.—POTTERY.—T. H. Copeland, Geddes, N. Y.
8,443.—CARD OF BUTTONS.—G. Farmer, Brooklyn, N. Y.
8,444, 8,445.—CARPETS.—H. F. Goetze, Boston, Mass.
8,446, 8,447.—TYPE.—C. E. Heyer, Boston, Mass.
8,448.—COFFIN PLATES.—W. Parkin, Taunton, Mass.
8,449.—ADVERTISING LANTERN.—F. L. Fisch, N. Y. city.

SCHEDULE OF PATENT FEES.

- On each Caveat. \$10
On each Trade mark. \$25
On filing each application for a Patent (17 years). \$15
On issuing each original Patent. \$20
On appeal to Examiners-in-Chief. \$10
On appeal to Commissioner of Patents. \$20
On application for Reissue. \$30
On filing a Disclaimer. \$10
On an application for Design (3 1/2 years). \$10
On application for Design (7 years). \$15
On application for Design (14 years). \$30

CANADIAN PATENTS.

LIST OF PATENTS GRANTED IN CANADA, June 18 to July 7, 1875.

- 4,886.—P. Wright, Ottawa City, Ont. Backband for cart saddles. June 18, 1875.
4,887.—G. H. Reynolds, New York city, U. S. Rock-drilling machine. June 18, 1875.
4,888.—L. Munro, Ottawa, Ont., et al. Spooler and pin-cushion combined. June 24, 1875.
4,889.—J. E. Buerk, Boston, Mass., U. S. Watchman's time detector. June 24, 1875.
4,890.—W. P. Widdfield, Siloam, Ont. Saw carriage and feed movement. June 24, 1875.
4,891.—E. Seaman, Andover, N. Y., U. S. Window blind. June 24, 1875.
4,892.—J. S. Wallace et al, Belfast, Ireland. Fire extinguisher. June 24, 1875.
4,893.—L. B. Stilson, Minneapolis, Minn., U. S. Safety car truck. June 24, 1875.
4,894.—E. F. Chapin et al., Boston, Mass., U. S. Lamp extinguisher. June 24, 1875.
4,895.—O. Pagan et al., Philadelphia, Pa., U. S. Roller tube expander. June 24, 1875.
4,896.—J. M. Munro et al., Ottawa, Ont. Horse hoe. June 26, 1875.
4,897.—F. Rourk, Montreal, P. Q. Ventilation of sewers. June 28, 1875.
4,898.—N. Campbell, Rochester, N. Y., U. S. Curtain fixture. June 28, 1875.
4,899.—W. T. Wood, Mount Juliet, Tenn., U. S. Lamp extinguisher. June 28, 1875.
4,900.—A. A. Post, New York city, U. S. Liquid meter. June 28, 1875.
4,901.—F. J. Davis, Newport, Vt., U. S. Foot power lasting tool. June 28, 1875.
4,902.—H. Hagle, Warwick, Ont. Gate. June 28, 1875.
4,903.—J. S. Brooks, Pittsburgh, Pa., U. S. Backing electrotypes. June 28, 1875.

- 4,904.—J. C. Rorick, Wauseon, Ohio, U. S. Butter worker. June 28, 1875.
4,905.—C. J. Eames, New York city, U. S. Hydrocarbon reducing furnace. June 28, 1875.
4,906.—C. Lundy, East Gwillimbury, Ont. Hay rake. June 28, 1875.
4,907.—J. Hewitt, Grimsby, Ont. Fluting and glossing iron. June 28, 1875.
4,908.—A. Beaudry, Boston, Mass., U. S. Adze and ax. June 28, 1875.
4,909.—J. Flower, Detroit, Mich., U. S. Street hydrant. June 28, 1875.
4,910.—A. R. Morgan, New York city, U. S. Stove. June 28, 1875.
4,911.—Wm. C. Shorey, Napanee, Ont. Horse hayknives and forks. July 6, 1875.
4,912.—S. Spencer, Boston, Mass., U. S. Burial casket. July 6, 1875.
4,913.—A. Gardner, Windsor, P. Q. Bevel pump engine. July 6, 1875.
4,914.—G. W. Walker, Malden, Mass., U. S. Portable ranges. July 6, 1875.
4,915.—S. O. Greening, Hamilton, Ont. Lightning rod. July 6, 1875.
4,916.—J. F. Glidden, De Kalb, Ill., U. S. Wire fence. July 6, 1875.
4,917.—C. A. Sipe, Fairmont, W. Va., U. S. Apparatus for depositing coffins. July 6, 1875.
4,918.—M. Waterbury, Mason City, Iowa, U. S. Lamp extinguisher. July 6, 1875.
4,919.—J. Bellamy, Newtonville, Ont. Bag holder and truck. July 6, 1875.
4,920.—A. D. Williams, Yorkville, Ont. Dinner pall. July 6, 1875.
4,921.—R. C. Lambert, Quincy, Mass., U. S. Heel and sole trimming machine. July 6, 1875.
4,922.—R. R. Osgood, Troy, N. Y., U. S. Dredging machine. July 6, 1875.
4,923.—E. A. Beers, De Kalb Center, Ill., U. S. Draft equalizer. July 6, 1875.
4,924.—W. D. Peters et al., Boston, Mass., U. S. Drainer for ships. July 6, 1875.
4,925.—A. W. Newell, Bradford, Pa., U. S. Tincture and prescription bottle. July 6, 1875.
4,926.—C. C. Brayley, Toronto, Ont. Rotary engine. July 6, 1875.
4,927.—N. W. Clark, Clarkston, Mich., U. S. Fish-hatch ing apparatus. July 6, 1875.
4,928.—W. S. Harland, Clinton, Ont. Self-heating glue pot. July 6, 1875.
4,929.—J. Payne, New Hamburg, Ont. Thistle destroyer. July 6, 1875.
4,930.—A. H. Ladin, New York city, U. S. Disintegrating fibrous substances. July 6, 1875.
4,931.—A. Forbriger, Cincinnati, Ohio, U. S. Drawing or copy book. July 6, 1875.
4,932.—D. A. Root, South Bay City, Mich., U. S. Pad lock. July 6, 1875.
4,933.—W. E. Skinner, Milford, Mich., U. S. Quadrant bevel gage. July 6, 1875.
4,934.—W. M. Caterson, Philadelphia, Pa., U. S. Poison bottle. July 6, 1875.
4,935.—C. Windrath, Buffalo, N. Y., U. S. Cigar-bunching machine. July 6, 1875.
4,936.—R. Patrick et al., Branchton, Ont. Double-acting reversible rotary pump. July 7, 1875.
4,937.—G. C. Hill, Danbury, Conn., U. S. Ironing board. July 7, 1875.
4,938.—W. M. Fuller et al., New York city, U. S. Car heater. July 7, 1875.
4,939.—A. H. Ladin, New York city, U. S. Disintegrating fibrous substances. July 7, 1875.
4,940.—J. B. McDonald, Tiverton, Ont. Animal poke. July 7, 1875.
4,941.—D. W. Douglas, Almonte, Ont. Water filter. July 7, 1875.
4,942.—J. H. Crowell, Providence, R. I., U. S. Machine for making weavers' harness. July 7, 1875.
4,943.—J. M. Gover, Brockville, Ont. Extension drying table, etc. July 7, 1875.
4,944.—J. Martin, Jr., Toronto, Ont. Brick-making machine. July 7, 1875.
4,945.—Russel Pickel et al., Plattsburg, N. Y., U. S. Railway switch. July 7, 1875.
4,946.—D. Pease, Floyd, N. Y., U. S. Buckwheat cleaning machine. July 7, 1875.
4,947.—P. C. Marsh, Northampton, Mass., U. S. Reefing sails. July 7, 1875.
4,948 & 4,949.—E. Gray, Chicago, Ill., U. S. Electro harmonic telegraphs. July 7, 1875.

Advertisements.

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